



Department of Fisheries

15 November 1998

Mr. Bruce Halstead
U. S. Fish and Wildlife Service
1125 16th Street, Room 209
Arcata, California 95521

Re: Permit Numbers PRT-828950 and 1157

Dear Bruce:

I am writing to express my concerns about the PALCO (Maxxam Corporation) Habitat Conservation Plan (HCP) and Sustained Yield Plan (SYP) relative to issues of coho salmon take. In my opinion, the most important first step would be to **disconnect** the approval of the submitted plans from the headwaters buyout. I fully support public monies being spent to purchase significant tracts of old growth redwoods, but not if it means rushing to judgement on two terribly flawed plans. Purchase of the old growth stands should **not** be contingent on approving the HCP/SYP as submitted. In the long-term (50 years!), implementation of the HCP on more than 200,000 acres (with the possibility of future land purchases by Maxxam Corporation) will not protect and preserve coho salmon and other aquatic/riparian dependent species. I would rather see the entire deal evaporate and have the HCP/SYP documents resubmitted with adequate safeguards for stream and other organisms.

For the past twenty-seven years, I have taught courses in fisheries at Humboldt State and directed graduate research projects on salmonid stream ecology throughout northern California. I have co-authored papers on 1) the effects of roads on salmonid habitat and 2) stream restoration to improve that natural production of anadromous salmonids. During the summer of 1998, I had court-ordered (Coho Salmon et al., v. Pacific Lumber et al.) access to five watersheds to inspect 59 Timber Harvest Plans on Scotia Pacific Holding Company lands relative to coho salmon take issues.

My greatest concern about the HCP/SYP has to do with the proposed streamside buffers. Although the proposed protection zones for class I (fish bearing) and class II (aquatic life other than fishes present) are an improvement over the **existing** California Forest Practice Rules, they do not insure an adequate supply of large wood recruitment to these streams. Dr. Leslie Reid, USDA Forest Service Southwest Research Station, Redwood Sciences Laboratory, has calculated that the proposed buffer zones will decrease woody debris levels by 51% in class I streams and 79% in class II streams compared to wood inputs from unmanaged stands. It is important to recognize that the Forest Practice Rules can be (and should be!) made more restrictive regarding timber harvest adjacent to streams, but

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that the HCP/SYP will be in place for 50 years. I recommend that the no-cut buffers on class I and II streams be at least one site potential tree height in order to provide a suite of riparian zone functions including terrestrial/aquatic linkages.

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The greatest failing of the proposed plan is its failure to provide any stream side buffers for class III streams. The only restrictions have to do with equipment exclusion zones, widths of these zones being established based on slope classifications. The proposed zones will not retain any conifers adjacent to the many miles of class III channels. These channels require a no-cut buffer of at least one site potential tree height in order to minimize adverse cumulative effects of timber harvest and road networks on class I and II channels downstream. One of the goals in "storm-proofing" roads is to disconnect the road network from stream channels. The stream channels themselves, by definition, are connected, and sediments entering class III channels will be transported downstream to fill in pools and degrade spawning and rearing habitat for coho salmon and other aquatic species. Class III streams must have a no-cut buffer zone to avoid adverse cumulative effects downstream. This requirement would eliminate the problem of incorrectly classifying class II streams as class III's, a common occurrence. In short, the entire stream network requires an intact, functioning riparian zone if the aquatic system is going to be protected and maintained.

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It is my professional opinion that, if approved as submitted, this plan will appreciably reduce the likelihood of survival and recovery of coho salmon in the wild within the boundaries of the Northern California/Southern Oregon ESU, currently listed as threatened under the Endangered Species Act. The provisions of this plan will lead to further declines in coho salmon population due to habitat loss and degradation. The terms of this plan, if approved as submitted, may well be applied in HCP's submitted by other large landowners in Northern California and contribute to the extinction of coho salmon in this ESU. I urge that the plan not be approved as submitted.

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Sincerely,



Terry D. Roelofs, Professor